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EXAMINER

DESIR, PIERRE LOUIS

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/692,196

Applicant(s)

BLACK, GREG R.

Examiner

Pierre-Louis Desir

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. Information Disclosure Statement Not Considered, No List of References

The information disclosure statement filed 10/23/03 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, applications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered.

Applicant is advised to use Form PTO-1449 or PTO/SB/08A and 08B to enter the relevant references.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8, 11-18, 20-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Maggenti et al. (Maggenti), U.S. Patent No. 6477150.

Regarding claim 1, Maggenti discloses a method of push-to-talk operation, comprising: monitoring push-to-talk usage of a mobile communication device (Maggenti describes three fields where the monitoring process takes place; a first field to designate whether the PTT message is a request for the talker privilege or a release of the talker privilege, a second field to

identify which CD has sent the PTT message; and a third field is used to provide a unique message identifier to allow subsequent PTT release and PTX messages to reference a specific PTT request) (See col. 30, lines 33-41); determining a push-to-talk metric based on the push to talk usage of the mobile communication device (i.e. for every transmitted message, a response message is expected within a predetermined time; thus, it is clear that a determination of a push-to-talk metric is based on the predetermination on how long it takes to receive a response message after transmitting a message) (see col. 30, lines 43-45); and selecting a push-to-talk session unavailability mitigation based on the push-to-talk metric (i.e. if a response message is not received within the predetermined time, the message is retransmitted. And, if a response message is never received, the communication device transitions to the idle state; thus, due to the not receiving a response message within the predetermined time, a selection of push-to-talk session unavailability is made) (see col. 30, lines 45-50, and 57-61).

Regarding claim 2, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the session unavailability comprises a delay of an activation of a push-to-talk session (Maggenti discloses delay is associated with transitioning a communication device out of the dormant state to the connected state; thus, one skill in the art would unhesitatingly conceptualize that the session of unavailability is comprised a delay of an activation of a push-to-talk session) (see col. 35, lines 48-49).

Regarding claim 3, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the session unavailability mitigation comprises a mitigation of delay of an activation of a push-to-talk session (Maggenti discloses because of the delay associated with transitioning a communication device out of the dormant state to the connected state, the

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communication device performs voice buffering to mitigate the transition delay) (see 35, lines 48-51).

Regarding claim 4, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the session unavailability mitigation further comprises selecting a packet switched channel type (Maggenti discloses a MSC, which provides switching and interface circuitry, comprising a Inter Working Function (IFW), which is used for processing and converting voice/or data into packets suitable for a particular data network through which communication takes place. When a user presses the push-to-talk key, a request is generated. With the pressing of the key, session unavailability mitigation takes place for the receiving user. This session unavailability mitigation comprises the selection of the appropriate channel, during which the data is formatted for transmission over the appropriate channel, circuit switched or packet switched) (see col. 6, lines 48-61).

Regarding claim 5, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the session unavailability mitigation further comprises establishing a reverse link for a selected time period in anticipation that a reverse push-to-talk session is established (Maggenti discloses that each communication device member can establish forward link and reverse link. In addition, as explained earlier, when a user presses the push-to-talk (PTT) key to send a message, a response message is expected within a predetermined; thus, when a message is sent after the PTT is pressed, a response message is expected through the forward link within a predetermined time) (see col. 6, lines 24-31, and col. 30, lines 43-48).

Regarding claim 6, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the session unavailability mitigation comprises holding a push-to-talk

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connection for a selected time period after release of a push-to-talk button in anticipation that a subsequent push-to-talk session is established (the PTT key is pressed so that a message could be sent. The key is released so that a response message can be received within a predetermined time. Therefore, one skill in the art would unhesitatingly conceptualize the inherency of the fact that the session unavailability mitigation comprises holding a PTT connection for a selected period of time after release of the PTT key in anticipation that a subsequent PTT session is established) (see fig. 8, col. 30, lines 43-48, col. 33, lines 59-67, and col. 34, lines 1-9).

Regarding claim 7, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the session unavailability mitigation is a mitigation of interruption of a push-to-talk channel (the response message that is sent back due to the PTT message comprises several fields used to convey information. One the field is defined to indicate granting, denying, or revoking the transmission privilege. And, another field is defined to indicate that a higher priority has been granted transmission privilege. One skill in the art would immediately envision with granting of transmission privilege to the higher priority, an interruption of the push-to-talk channel takes place) (see col. 31, lines 10-24).

Regarding claim 8, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the session unavailability mitigation comprises selecting a circuit switched channel type (Maggenti discloses a MSC, which provides switching and interface circuitry, comprising a Inter Working Function (IFW), which is used for processing and converting voice/or data into packets suitable for a particular data network through which communication takes place. When a user presses the push-to-talk key, a request is generated. With the pressing of the key, session unavailability mitigation takes place for the receiving user.

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This session unavailability mitigation comprises the selection of the appropriate channel, during which the data is formatted for transmission over the appropriate channel, circuit switched or packet switched) (see col. 6, lines 48-61).

Regarding claim 11, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the push-to-talk metric is based on a measurement of a length of a delay of a push-to-talk channel activation (i.e. as described in claim 1 rejection, determination of a push-to-talk metric is based on the predetermination on how long it takes to receive a response message after transmitting a message. In addition, Maggenti described a timer, which is called an inactivity timer. The disclosed timer is used for measuring a net's hang time, which is defined as a time period in which no member of a net is transmitting information to the other member) (see col. 30, lines 43-45, col. 34, lines 16-19).

Regarding claim 12, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the push-to-talk metric is based on a probability of an activation of a subsequent push-to-talk session (as disclosed in claim 11 rejection, the inactivity timer disclosed by Maggenti is used to measure hang time; which expectedly, as one skilled in the art would have perceived, covers the claimed invention as related to the push-to-talk metric/calculation/measurement based on a probability of an activation of a subsequent PTT session) (see col. 30, lines 43-45, col. 34, lines 16-19).

Regarding claim 13, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the push-to-talk metric is based on a time measurement of the length of time of a push-to-talk channel interruption (the response message that is sent back due to the PTT message comprises several fields used to convey information. One the field is defined

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to indicate granting, denying, or revoking the transmission privilege. And, another field is defined to indicate that a higher priority has been granted transmission privilege. One skill in the art would immediately envision with granting of transmission privilege to the higher priority, an interruption of the push-to-talk channel takes place. Thus, knowing the fact that a response message is expected within a predetermined time after pressing the PTT key to start a communication process, and that the inactivity timer is used to measure hang time, one skill in the art would unhesitatingly conceptualize that the push-to-talk metric is based on a time measurement of the length of time of a push-to-talk channel interruption) (see col. 30, lines 43-45, col. 31, lines 10-24, and col. 34, lines 16-19).

Regarding claim 14, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the push-to-talk metric is based on a probability of a push-to-talk channel interruption (one the field, which is used to convey information, is defined to indicate granting, denying, or revoking the transmission privilege. And, another field is defined to indicate that a higher priority has been granted transmission privilege. One skill in the art would immediately envision with granting of transmission privilege to the higher priority, an interruption of the push-to-talk channel takes place. Thus, knowing the fact that a response message is expected within a predetermined time after pressing the PTT key to start a communication process, and that the inactivity timer is used to measure hang time, one skill in the art would unhesitatingly conceptualize the push-to-talk metric is based on a probability of a push-to-talk channel interruption (see col. 30, lines 43-45, col. 31, lines 10-24, and col. 34, lines 16-19).

Regarding claim 15, Maggenti discloses a method of push-to-talk operation as described

in claim 1 rejection, wherein the push-to-talk metric is based on a time between subsequent push-to-talk sessions from the same mobile communication device (when a message is sent, the sender expects a response message, and any subsequent message thereafter associated with a message sent, within a predetermined time) (see col. 30, lines 43-45).

Regarding claim 16, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the push-to-talk metric is based on a probability of subsequent push-to-talk sessions from the same mobile communication device (when a message is sent, the sender expects a response message, and any subsequent message thereafter associated with a message sent, within a predetermined time) (see col. 30, lines 43-45).

Regarding claim 17, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the push-to-talk metric is based on a probability of a push-to-talk session from one mobile communication device and a subsequent push-to-talk session from another mobile communication device on a reverse channel (when a message is sent, the sender expects a response message, and any subsequent message thereafter associated with a message sent, within a predetermined; thus, when a message is sent after the PTT is pressed, a response message is expected through the forward link within a predetermined time) (see col. 6, lines 24-31, and col. 30, lines 43-48).

Regarding claim 18, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection, wherein the push-to-talk metric is based on a length of time of a push-to-talk session (i.e. for every transmitted message, a response message is expected within a predetermined time; thus, it is clear that a determination of a push-to-talk metric is based on the predetermination on how long it takes to receive a response message after transmitting a

message) (see col. 30, lines 43-45).

Regarding claim 20, Maggenti discloses a method of push-to-talk operation for a mobile communication device, comprising: comparing at least one push-to-talk usage metric to a push-to-talk usage metric threshold (i.e. for every transmitted message, a response message is expected within a predetermined time; thus, it is clear that a determination of a push-to-talk metric is based on the predetermination on how long it takes to receive a response message after transmitting a message) (see col. 30, lines 43-45); selecting a session unavailability mitigation based on comparing the push-to-talk usage metric to the push-to-talk usage metric threshold (i.e. if a response message is not received within the predetermined time, the message is retransmitted. And, if a response message is never received, the communication device transitions to the idle state; thus, due to the not receiving a response message within the predetermined time, a selection of push-to-talk session unavailability is made) (see col. 30, lines 45-50, and 57-61); establishing a push-to-talk session employing the session unavailability mitigation (each time the PTT switch is pressed a request message is sent, which is the process of establishing a PTT session. Also, a response message is expected within a predetermined time. Therefore, a PTT session employing the session unavailability mitigation takes place each time the PTT switch is pressed) (see col. 30, lines 43-45); monitoring a parameter of operation of the push-to-talk session device (Maggenti describes three fields where the monitoring process takes place; a first field to designate whether the PTT message is a request for the talker privilege or a release of the talker privilege, a second field to identify which CD has sent the PTT message; and a third field is used to provide a unique message identifier to allow subsequent PTT release and PTX messages to reference a specific PTT request) (See col. 30, lines 33-41); and modifying the

push-to-talk metric based on the parameter of operation of the push-to-talk session (for e.g. if a response message is not received within a predetermined time after having sent a request message, a modification process takes place by retransmitting the request. It is worth to note that part of the modification is the fact that the predetermined time can be for a fixed time or can be altered accordingly) (see col. 30, lines 43-50).

Regarding claim 21, Maggenti discloses a method as described in claim 21, wherein the session unavailability comprises at least one of delay of an activation of a push-to-talk channel and an interruption of a push-to-talk channel (Maggenti discloses delay is associated with transitioning a communication device out of the dormant state to the connected state; thus, one skill in the art would unhesitatingly conceptualize that the session of unavailability is comprised a delay of an activation of a push-to-talk session) (see col. 35, lines 48-49).

Regarding claim 22, Maggenti discloses a method as described in claim 21, further comprising modifying a session unavailability mitigation parameter as a function of a push-to-talk usage metric (for e.g. if a response message is not received within a predetermined time after having sent a request message, a modification process takes place by retransmitting the request. It is worth to note that part of the modification is the fact that the predetermined time can be for a fixed time or can be altered accordingly) (see col. 30, lines 43-50)

Regarding claim 23, Maggenti discloses a method as disclosed in claim 22 rejection, wherein the session unavailability mitigation parameter comprises a time to delay the end of a push-to-talk session after a user releases a push-to-talk button (Maggenti discloses because of the delay associated with transitioning a communication device out of the dormant state to the connected state, the communication device performs voice buffering to mitigate the transition

delay) (see 35, lines 48-51).

Regarding claim 24, Maggenti discloses a method as described in claim 22 rejection, wherein the session unavailability mitigation parameter comprises a selection of a circuit switched push-to-talk session and a packet switched push-to-talk session (Maggenti discloses a MSC, which provides switching and interface circuitry, comprising a Inter Working Function (IFW), which is used for processing and converting voice/or data into packets suitable for a particular data network through which communication takes place. When a user presses the push-to-talk key, a request is generated. With the pressing of the key, session unavailability mitigation takes place for the receiving user. This session unavailability mitigation comprises the selection of the appropriate channel, during which the data is formatted for transmission over the appropriate channel, circuit switched or packet switched) (see col. 6, lines 48-61).

Regarding claim 25, Maggenti discloses a method as described in claim 22 rejection, wherein the session unavailability mitigation parameter comprises a duration of a reverse push-to-talk session from another mobile communication device (Maggenti discloses that each communication device member can establish forward link and reverse link. In addition, as explained earlier, when a user presses the push-to-talk (PTT) key to send a message, a response message is expected within a predetermined; thus, when a message is sent after the PTT is pressed, a response message is expected through the forward link within a predetermined time from another communication device) (see col. 6, lines 24-31, and col. 30, lines 43-48).

Regarding claim 26, Maggenti discloses a method of push-to-talk operation for a mobile communication device, comprising: loading at least one push-to-talk mitigation parameter (i.e. with the pressing of the PTT key, the process of loading a PTT mitigation parameter takes place)

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(see col. 30, lines 27-30); executing a push-to-talk algorithm to configure at least one push-to-talk session unavailability mitigation based on the push-to-talk mitigation parameter, the push-to-talk session unavailability mitigation controlling the operation of a push-to-talk function of the mobile communication device (when the PTT is pressed, it represents the start of the execution, the configuration, and the controlling of the PTT process. As described above, with the pressing of the key a request message is sent, and a response message is expected within a predetermined time) (see col. 30, lines 43-45); establishing a push-to-talk session for the mobile communication device (as described above, the pressing of the PTT key establishes a PTT session for the communication device) (see col. 30, lines 27-30); monitoring at least one metric of push-to-talk operation of the mobile communication device (Maggenti describes three fields where the monitoring process takes place; a first field to designate whether the PTT message is a request for the talker privilege or a release of the talker privilege, a second field to identify which CD has sent the PTT message; and a third field is used to provide a unique message identifier to allow subsequent PTT release and PTX messages to reference a specific PTT request) (See col. 30, lines 33-41); modifying a push-to-talk mitigation parameter based on the at least one metric of push-to-talk operation of the mobile communication device (for e.g. if a response message is not received within a predetermined time after having sent a request message, a modification process takes place by retransmitting the request. It is worth to note that part of the modification is the fact that the predetermined time can be for a fixed time or can be altered accordingly) (see col. 30, lines 43-50); and reconfiguring the at least one push-to-talk session unavailability mitigation based on the modified push-to-talk mitigation parameter (modification process and the reconfiguration process are analogous) (see col. 30, lines 43-50).

Regarding claim 27, Maggenti discloses a method as described in the rejection of claim 26, wherein session unavailability comprises one of a delay of an activation of a push-to-talk session, and an interruption of a push-to-talk session (Maggenti discloses delay is associated with transitioning a communication device out of the dormant state to the connected state; thus, one skill in the art would unhesitatingly conceptualize that the session of unavailability is comprised a delay of an activation of a push-to-talk session) (see col. 35, lines 48-49).

Regarding claim 28, Maggenti discloses a method as described in the rejection of claim 26, wherein the session unavailability mitigation comprises one of selecting a packet switched channel type (Maggenti discloses a MSC, which provides switching and interface circuitry, comprising a Inter Working Function (IFW), which is used for processing and converting voice/or data into packets suitable for a particular data network through which communication takes place. When a user presses the push-to-talk key, a request is generated. With the pressing of the key, session unavailability mitigation takes place for the receiving user. This session unavailability mitigation comprises the selection of the appropriate channel, during which the data is formatted for transmission over the appropriate channel, circuit switched or packet switched) (see col. 6, lines 48-61), establishing a reverse link for a selected time period unless a reverse push-to-talk session is established (Maggenti discloses that each communication device member can establish forward link and reverse link. In addition, as explained earlier, when a user presses the push-to-talk (PTT) key to send a message, a response message is expected within a predetermined; thus, when a message is sent after the PTT is pressed, a response message is expected through the forward link within a predetermined time) (see col. 6, lines 24-31, and col. 30, lines 43-48), and holding a push-to-talk connection for a selected time period after release of

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a push-to-talk button unless a subsequent push-to-talk session is established (the PTT key is pressed so that a message could be sent. The key is released so that a response message can be received within a predetermined time. Therefore, one skill in the art would unhesitatingly conceptualize the inherency of the fact that the session unavailability mitigation comprises holding a PTT connection for a selected period of time after release of the PTT key in anticipation that a subsequent PTT session is established) (see fig. 8, col. 30, lines 43-48, col. 33, lines 59-67, and col. 34, lines 1-9).

Regarding claim 29, Maggenti discloses a method of push-to-talk operation as described in the rejection of claim 26, wherein the session unavailability mitigation comprises one of selecting a circuit switched channel type, prohibiting a network handover of the mobile communication device, and prohibiting a network handover of the mobile communication device for a selected time period (Maggenti discloses a MSC, which provides switching and interface circuitry, comprising a Inter Working Function (IFW), which is used for processing and converting voice/or data into packets suitable for a particular data network through which communication takes place. When a user presses the push-to-talk key, a request is generated. With the pressing of the key, session unavailability mitigation takes place for the receiving user. This session unavailability mitigation comprises the selection of the appropriate channel, during which the data is formatted for transmission over the appropriate channel, circuit switched or packet switched) (see col. 6, lines 48-61).

Regarding claim 30, Maggenti discloses an apparatus for push-to-talk operation, comprising: a usage monitor configured to monitor push-to-talk usage of a mobile communication device (Maggenti describes three fields where the monitoring process takes

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place; a first field to designate whether the PTT message is a request for the talker privilege or a release of the talker privilege, a second field to identify which CD has sent the PTT message; and a third field is used to provide a unique message identifier to allow subsequent PTT release and PTX messages to reference a specific PTT request) (See col. 30, lines 33-41); a metric determination module configured to determine a push-to-talk metric based on the push to talk usage of the mobile communication device (i.e. for every transmitted message, a response message is expected within a predetermined time; thus, it is clear that a determination of a push-to-talk metric is based on the predetermination on how long it takes to receive a response message after transmitting a message) (see col. 30, lines 43-45); and a mitigation selector configured to select a push-to-talk session unavailability mitigation based on the push-to-talk metric (i.e. if a response message is not received within the predetermined time, the message is retransmitted. And, if a response message is never received, the communication device transitions to the idle state; thus, due to the not receiving a response message within the predetermined time, a selection of push-to-talk session unavailability is made) (see col. 30, lines 45-50, and 57-61).

Regarding claim 31, Maggenti discloses an apparatus for push-to-talk operation as described above, wherein the session unavailability mitigation comprises a mitigation of delay of an activation of a push-to-talk session (Maggenti discloses because of the delay associated with transitioning a communication device out of the dormant state to the connected state, the communication device performs voice buffering to mitigate the transition delay) (see 35, lines 48-51).

Regarding claim 32, Maggenti discloses an apparatus as described above, wherein the

session unavailability mitigation further comprises one of selecting a packet switched channel type (Maggenti discloses a MSC, which provides switching and interface circuitry, comprising an Inter Working Function (IFW), which is used for processing and converting voice/or data into packets suitable for a particular data network through which communication takes place. When a user presses the push-to-talk key, a request is generated. With the pressing of the key, session unavailability mitigation takes place for the receiving user. This session unavailability mitigation comprises the selection of the appropriate channel, during which the data is formatted for transmission over the appropriate channel, circuit switched or packet switched) (see col. 6, lines 48-61), establishing a reverse link for a selected time period in anticipation that a reverse push-to-talk session is established (Maggenti discloses that each communication device member can establish forward link and reverse link. In addition, as explained earlier, when a user presses the push-to-talk (PTT) key to send a message, a response message is expected within a predetermined; thus, when a message is sent after the PTT is pressed, a response message is expected through the forward link within a predetermined time) (see col. 6, lines 24-31, and col. 30, lines 43-48) and holding a push-to-talk connection for a selected time period after release of a push-to-talk button in anticipation that a subsequent push-to-talk session is established (the PTT key is pressed so that a message could be sent. The key is released so that a response message can be received within a predetermined time. Therefore, one skill in the art would unhesitatingly conceptualize the inherency of the fact that the session unavailability mitigation comprises holding a PTT connection for a selected period of time after release of the PTT key in anticipation that a subsequent PTT session is established) (see fig. 8, col. 30, lines 43-48, col. 33, lines 59-67, and col. 34, lines 1-9).

Regarding claim 33, Maggenti discloses an apparatus as described above, wherein the session unavailability mitigation is a mitigation of interruption of a push-to-talk channel (the response message that is sent back due to the PTT message comprises several fields used to convey information. One the field is defined to indicate granting, denying, or revoking the transmission privilege. And, another field is defined to indicate that a higher priority has been granted transmission privilege. One skill in the art would immediately envision with granting of transmission privilege to the higher priority, an interruption of the push-to-talk channel takes place) (see col. 31, lines 10-24).

Regarding claim 34, Maggenti discloses an apparatus as described above, wherein the session unavailability mitigation comprises one of selecting a circuit switched channel type, prohibiting a network handover of the mobile communication device, and prohibiting a network handover of the mobile communication device for a selected time period (Maggenti discloses a MSC, which provides switching and interface circuitry, comprising a Inter Working Function (IFW), which is used for processing and converting voice/or data into packets suitable for a particular data network through which communication takes place. When a user presses the push-to-talk key, a request is generated. With the pressing of the key, session unavailability mitigation takes place for the receiving user. This session unavailability mitigation comprises the selection of the appropriate channel, during which the data is formatted for transmission over the appropriate channel, circuit switched or packet switched) (see col. 6, lines 48-61).

Regarding claim 35, Maggenti discloses an apparatus as described above, wherein the push-to-talk metric is based on one of a measurement of a length of a delay of a push-to-talk channel activation (i.e. as described above, determination of a push-to-talk metric is based on the

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predetermination on how long it takes to receive a response message after transmitting a message. In addition, Maggenti described a timer, which is called an inactivity timer. The disclosed timer is used for measuring a net's hang time, which is defined as a time period in which no member of a net is transmitting information to the other member) (see col. 30, lines 43-45, col. 34, lines 16-19), and a probability of an activation of a subsequent push-to-talk session (one the field, which is used to convey information, is defined to indicate granting, denying, or revoking the transmission privilege. And, another field is defined to indicate that a higher priority has been granted transmission privilege. One skill in the art would immediately envision with granting of transmission privilege to the higher priority, an interruption of the push-to-talk channel takes place. Thus, knowing the fact that a response message is expected within a predetermined time after pressing the PTT key to start a communication process, and that the inactivity timer is used to measure hang time, one skill in the art would unhesitatingly conceptualize the push-to-talk metric is based on a probability of a push-to-talk channel interruption (see col. 30, lines 43-45, col. 31, lines 10-24, and col. 34, lines 16-19).

Regarding claim 36, Maggenti discloses an apparatus as described above, wherein the push-to-talk metric is based on one of a time measurement of the length of time of a push-to-talk channel interruption (the response message that is sent back due to the PTT message comprises several fields used to convey information. One the field is defined to indicate granting, denying, or revoking the transmission privilege. And, another field is defined to indicate that a higher priority has been granted transmission privilege. One skill in the art would immediately envision with granting of transmission privilege to the higher priority, an interruption of the push-to-talk channel takes place. Thus, knowing the fact that a response message is expected within a

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predetermined time after pressing the PTT key to start a communication process, and that the inactivity timer is used to measure hang time, one skill in the art would unhesitatingly conceptualize that the push-to-talk metric is based on a time measurement of the length of time of a push-to-talk channel interruption) (see col. 30, lines 43-45, col. 31, lines 10-24, and col. 34, lines 16-19), and a probability of a push-to-talk channel interruption (one the field, which is used to convey information, is defined to indicate granting, denying, or revoking the transmission privilege. And, another field is defined to indicate that a higher priority has been granted transmission privilege. One skill in the art would immediately envision with granting of transmission privilege to the higher priority, an interruption of the push-to-talk channel takes place. Thus, knowing the fact that a response message is expected within a predetermined time after pressing the PTT key to start a communication process, and that the inactivity timer is used to measure hang time, one skill in the art would unhesitatingly conceptualize the push-to-talk metric is based on a probability of a push-to-talk channel interruption (see col. 30, lines 43-45, col. 31, lines 10-24, and col. 34, lines 16-19).

Regarding claim 37, Maggenti discloses an apparatus as described wherein the push-to-talk metric is based on one of a time between subsequent push-to-talk sessions from the same mobile communication device (when a message is sent, the sender expects a response message, and any subsequent message thereafter associated with a message sent, within a predetermined time) (see col. 30, lines 43-45), and a probability of subsequent push-to-talk sessions from the same mobile communication device (when a message is sent, the sender expects a response message, and any subsequent message thereafter associated with a message sent, within a predetermined time) (see col. 30, lines 43-45).

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Regarding claim 38, Maggenti discloses an apparatus as described above, wherein the push-to-talk metric is based on a probability of a push-to-talk session from one mobile communication device and a subsequent push-to-talk session from a another mobile communication device on a reverse channel (when a message is sent, the sender expects a response message, and any subsequent message thereafter associated with a message sent, within a predetermined; thus, when a message is sent after the PTT is pressed, a response message is expected through the forward link within a predetermined time) (see col. 6, lines 24-31, and col. 30, lines 43-48).

Regarding claim 39, Maggenti discloses an apparatus as described above, wherein the push-to-talk metric is based on one of a length of time of a push-to-talk session, and a probability of handoff of the push-to-talk session (i.e. for every transmitted message, a response message is expected within a predetermined time; thus, it is clear that a determination of a push-to-talk metric is based on the predetermination on how long it takes to receive a response message after transmitting a message) (see col. 30, lines 43-45).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-10, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey, U.S. Patent No. 6449491.

Regarding claim 9, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection. Although Maggenti discloses a method of push-to-talk operation as described above, Maggenti fails to disclose a method of push-to-talk operation wherein the session unavailability mitigation comprises prohibiting a network handover of the mobile communication device.

However, Dailey discloses a terminal, which includes a PTT button, operatively associated with a disclosed controller and it is used to initiate and conduct half-duplex group calls. During the half-duplex group calls, most terminals of the group are not transmitting at any given time; as a result, these terminals cannot transmit information that is needed for handoffs. Thus, network handover would be prohibited because of this inability (see col. 8, lines 64-67).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Maggenti with the teachings of Dailey to arrive at a PTT method wherein the session unavailability mitigation comprises prohibiting a network handover of the mobile communication device. Taking into consideration the process of transferring data session from one channel to another, as described by Maggenti, the combination of Maggenti and Dailey to arrive at the claimed invention would be a mere addition to the method disclosed by Maggenti for his method inherently includes the teachings of Dailey.

Regarding claim 10, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection. Although Maggenti discloses a method of push-to-talk operation as described above, Maggenti fails to disclose a PTT method wherein the session unavailability mitigation comprises prohibiting a network handover of the mobile communication device for a selected time period.

However, Dailey disclosed that in order to provide handoff, information must be transmitted over the traffic channel by the terminal (see col. 7, lines 60-67).

Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention, taking into consideration a response message is expected within a predetermined time when the PTT key is pressed, to immediately conceptualize to combine Maggenti and Dailey to obtain the claimed invention. The motivation to do so would have been to be able to use fewer channels for the group call.

Regarding claim 19, Maggenti discloses a method of push-to-talk operation as described in claim 1 rejection. Although Maggenti disclosed a method as described above, Maggenti fails to disclose a method wherein the push-to-talk metric is based on a probability of handoff of the push-to-talk session

However, Dailey discloses that handoffs can be provided as terminals move from an area to another (see col. 8, lines 60-64)

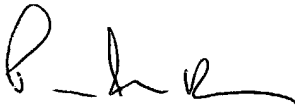
Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention, taking into consideration a response message is expected within a predetermined time when the PTT key is pressed, to immediately conceptualize to combine Maggenti and Dailey to obtain the claimed invention. The motivation to do so would have been to be able to use fewer channels for the group call.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is 703-605-4312. The examiner can normally be reached on Monday-Friday from 0800-1630.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Pierre-Louis Desir
AU 2681
10/23/2004

JEAN GELIN
PRIMARY EXAMINER

